

fact, the meteorological observatories thruout Italy are not strictly a part of the meteorological service. There is a meteorological observatory in the building of the Collegio Romano, where the central bureau is located, but the observatory is merely a part of the astronomical observatory of the Collegio Romano, and has a director who is a professor in the institution. There is also a meteorological observatory on the Capitoline Hill, which is, I understand, maintained by the municipality of Rome. Observatories similar to these are scattered thruout Italy, and report their observations to the central bureau thru an arrangement with either their institution or municipality.

In the forecast room a general working chart and supplementary temperature and pressure charts are used, as well as a chart showing the general conditions of the previous evening. The telegraphic reports are not received completely until about noon, and the forecasts are issued about 2 p. m. for all Italy, for the ensuing twenty-four hours. The printed daily publications embrace tabulated bulletins and weather maps quite similar to those issued in other European meteorological offices. The subscription price in Italy is 16 francs per year.

There seemed to be nothing special to note in connection with the instrumental equipment of the meteorological observatory visited. The recording hair hygrometer was found in use here also, but Doctor Palazzo said it was not giving satisfaction, contrary to the opinion received in other places. The wet and dry-bulb thermometers in the shelter were located on the roof on a stationary standard, but a fan was placed near the bulbs so that when a spring was wound up the air was set in motion, the effect being quite similar to that secured by our whirling apparatus. There is a large number of small stations in Italy where research work is being done, and special attention is now being given to the meteorological conditions in the tobacco fields. One of the divisions of the central bureau, directly under Professor Morti, has charge of the observations of earthquakes.

I had been informed by many during my visit that the winter was the coldest experienced during the past twenty-five years, and I was interested to learn what a comparison with the actual record would show; but I was not surprised to learn from Doctor Palazzo that the winter was very nearly normal. I have frequently been impressed, in my own experience, with the fact that people forget easily about the past, especially when weather is concerned, and I was rather interested in finding the same conditions obtaining abroad.

My trip from Naples to Mount Vesuvius on January 14 was made partly with the hope of visiting the observatory after my descent from the crater, but as I reached the funicular railway station, near which the observatory is located, I found my train, the last of the day, was about to start on the return trip, and I had but a passing glimpse of a Robinson anemometer and a thermometer shelter on the outside of this far-famed observatory.

In my traveling southward thru Italy I was much impressed with the increasing barometric pressure, and during my stay at Naples the barometer was uniformly at 30.5 inches. Sailing from that port on January 16 westward to Gibraltar there was practically no change in the reading of the barometer, and the weather continued much the same as in Italy. After passing by the "big rock" out into the Atlantic, bound for New York, I naturally expected the ship to turn in the direction of the port of destination. The course, however, lay to the south of west until the parallel of 35° was reached at 22° west longitude, passing about 300 miles south of the Azores. The course was thence directly west along this parallel as far as 60° west longitude, when it was changed to the northwest toward New York. This is the regular course of the Mediterranean fleet, and masters are required by the regulations of their companies to follow it during the winter season, as it lies

along the permanent "high" where storms are infrequent. In fact the winds were light and gentle during the greater part of this trip across the ocean, and the weather was quite summerlike, until the course turned to the northwestward across the Gulf Stream. This was in strong contrast with the stormy weather experienced on the northern route on my voyage eastward. During the summer season, however, when storms are infrequent, the sailing course of these vessels from Gibraltar is nearly in a direct line passing north of the Azores. New York was reached on January 31, 1907.

A BENEFICENT SCIENTIFIC MISSION.

The Syrian Protestant College at Beirut was founded in 1863 and opened in 1866, thru the efforts of North American Presbyterian missions. Complete courses are given in commerce, medicine, and biblical archaeology. Formerly the Arabic language was used, but now English is used, and many Beirut students have wandered over to the United States. Among the faculty are Rev. George E. Post, of New York, the professor of surgery; Dr. A. E. Day, of natural sciences, and Robert H. West, of mathematics and astronomy.

The Lee Observatory was founded in the year 1874 for special astronomical studies. The meteorological record began in June, 1874. The record is maintained by the students and assistants, of which there is a large number, under the especial oversight of the director. The officials responsible for this series are therefore as follows: 1874-1882, Rev. C. V. A. Van Dyck; 1882-1884, Dr. Jaris Nime; 1884-1899, Prof. Robert H. West; 1899 to date, Raymond S. Dugan. The observatory is on a high, rocky ridge that extends toward the north and northwest, above the sea. It is in latitude $33^{\circ} 54' 20''$ N., and longitude $35^{\circ} 28' 10''$ E. The cistern of the barometer is at present 35 meters above sea level. This series of observations, now continued for over thirty years, is the longest and most important in any portion of the Turkish dominion. From the beginning observations have been made three times a day, originally at 9 a. m., 3 and 9 p. m., but now at 8:30 a. m., 2:30 and 8:30 p. m. Since February, 1894, a Richard barograph has been in operation, and from some earlier date a Richard thermograph also. The observations have been published quite regularly in the annual volume of the Central Institute of Austria. The data for Beirut and Jerusalem afford almost the only basis we have for a statistical study of the climate of Palestine, and it is proper to say that we still need additional observatories in that region, especially a station on the summit of Mount Carmel, which is only 1400 feet above sea level (latitude $32^{\circ} 51'$ N., longitude $34^{\circ} 58'$ E.), and is easily made habitable.

May we not hope that all medical and educational missions will do as much for science as is anyway practicable. Especially may all missions imitate the example of the Jesuits in the Philippine Islands, where a great system for the study of climatology and for forecasting storms has been established by them. Such general applications of science contribute to the material progress and welfare, and hence to the intellectual and religious development of a nation, quite as much as any other form of activity. In modern times the first departure from a purely theological or religious mission was the establishment of medical missions, of which we have notable examples in the work of Dr. Peter Parker, at Canton, and George E. Post, at Beirut. Whatever missions can do for the intellectual and physical welfare of the nations is a truly noble work, and we must look upon a well organized weather bureau as most beneficent in all its relations to the people.

INTERCONVERSION OF CENTIGRADE AND FAHRENHEIT DEGREES.

As many American and English meteorologists find difficulty in thinking in the centigrade system, we call attention to